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John S. Beulick Armstrong Teasdale LLP Suite 2600 One Metropolitan Sq. St. Louis, MO 63102			EXAMINER CHOI, PETER H	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/066,148

**Applicant(s)**

SHARP, LINDA

**Examiner**

PETER CHOI

**Art Unit**

3623

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1.3.28 and 31-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1.3.28 and 31-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 7, 2008 has been entered.

### ***Response to Amendment***

2. In the response filed May 7, 2008, claims 1, 3, and 28 have been amended. Claims 2, 4-7, 9, 10, 29 and 30 have been canceled, and claims 33-42 are newly added.

### ***Response to Arguments***

3. Applicant's arguments with respect to amended subject matter incorporated into claim 1 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1, 3, 28, and 31-42 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1, 3, 28, and 31-42 are rejected under 35 U.S.C. 101 based on Supreme Court precedent, and recent Federal Circuit decisions, the Office's guidance to examiners is that a § 101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780,787-88 (1876). If neither of these requirements is met by the claim, the method is not a patent eligible process under 35 U.S.C. 101 and is non-statutory subject matter.

An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory process, the claim should positively recite the other statutory class (the thing or product) to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state. Dependent claims 3, 28, and 31-42 merely add further details of the contact relationship marketing strategy recited in claim 1 without including any tie to another statutory category nor any transformation of subject matter into a different state or thing.

Here, applicant's method steps, fail the first prong of the new Federal Circuit decision since they are not tied to another statutory class and can be performed without the use of a particular apparatus. Thus, claims 1, 3, 28, and 31-42 are non-statutory since they may be preformed within the human mind.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 33, 36-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al. (US Patent #7,152,039), in view of Francis Mulhern's "Customer Profitability Analysis: Measurement, Concentration and Research Directions" (previously provided, hereinafter referred to as Mulhern)

As per claim 1, Cheng et al. teaches a method for managing marketing comprising:

(a) creating a plurality of contact relationship levels representative of a customer lifecycle, wherein each contact relationship level is assigned to at least one marketing phase **(The present invention... categorizes a company's customer(s) into at least one lifecycle stage including, for example, Growing, Declining,**

**Defected, Stable, Insignificant and New; criteria for each lifecycle stage may be defined)** [Column 3, lines 40-44, Column 5, lines 61-63];

(b) assigning a relative interaction value that relates to progress in developing a relationship between a business and each contact of a plurality of contacts **(the available lifecycle measures may include Number of Orders, Quantity of Purchase or Revenue; A lifecycle factor may then be computed, the lifecycle factor being related to the size of the customer and the growth thereof according to the selected lifecycle measure)** [Column 4, lines 4-6, Column 5, lines 28-30];

(c) recording each actual interaction between the business and each contact of the plurality of contacts in an ongoing interaction record, wherein each actual interaction the plurality of potential interactions having an associated relative interaction value and variable cost **(The Number of Orders lifecycle measure may be defined as the total number of orders placed by the customer, the Quantity of Purchase measure may be defined as the total number of items purchased, and the Revenue lifecycle measure may be defined as the total money received by the company through sales of products and/or services to the customer) {these measures are performed on recorded interactions between the customer and the company}** [Column 4, lines 6-13];

(d) developing a data stream for each contact of the plurality of contacts, wherein the data stream tracks a cause and effect relationship between the recorded actual interactions, the corresponding relative interaction value of each recorded actual interaction **{among the data stored for each customer includes order frequency,**

**purchase quantity, purchase revenue, order date, changes in lifecycle factor}**

**[Table 1]**

(e) assigning each contact of the plurality of contacts to a contact relationship level of the plurality of contact relationship levels as each actual interaction is recorded; **(the customer may be categorized by evaluating a plurality of categorization criteria, wherein the categorizing step assigns the customer to one of a plurality of stages according to which of the plurality categorization criteria evaluates true)**  
[Column 4, lines 29-33] and

(f) generating a summary report for each contact of the plurality of contacts, the summary report based on the data stream for each contact **(Figure 3 is a diagram illustrating an exemplary report following the application of the method for categorizing customers.. Figure 4 is a diagram illustrating another exemplary report following the application of the method for customer categorization)**  
[Figures 3-4, Column 7, lines 35-40]

Cheng et al. does not explicitly teach the consideration of a variable cost of a plurality of potential interactions between the business and each contact of the plurality of contacts.

However, Mulhern considers the variable costs of interaction between a business and a customer **(A fully developed profitability model features the assignment of variables costs to customers.... In some industries there are specific and**

**definable acquisition costs, such as prospecting sales calls, product specifications, and price discounts) [Page 29].**

Cheng et al. is directed towards analyzing customer interactions and transactions with a company in determining the customer's relationship with said company, whereas Mulhern is directed towards customer analysis of profitability for developing targeted strategies. Thus, Cheng et al. and Mulhern are deemed to be directed towards the analogous endeavor of evaluating the relationship between a customer and a company. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Cheng et al. to include the consideration of variable costs of interaction between the business and customer, as taught by Mulhern, because doing so enables a company to maintain stability and growth in today's dynamic and highly competitive markets by evaluating the costs associated with retaining existing customers to develop efforts to ensure that current customers remain loyal and satisfied, induce existing customers to spend more, and grow their customer base [Column 1, lines 15-25].

As per claim 33, Cheng et al. teaches a method in accordance with claim 1, wherein the at least one marketing phrase includes an acquisition phase, a closing phase, and a retention phase **(The present invention categorizes a company's customer(s) into at least one lifecycle stage including, for example, Growing, Declining, Defected, Stable, Insignificant and New. Other lifecycle states may also**



**be defined within the context of the present invention and the present invention is not to be limited by the above-enumerated lifecycle stages)** [Column 3, lines 40-47] and wherein assigning a relative interaction value that relates to progress in developing the relationship between a business and each contact of a plurality of contacts and a variable cost to each of a plurality of potential interactions between and each contact of the plurality of contacts comprises **(the available lifecycle measures may include Number of Orders, Quantity of Purchase or Revenue; A lifecycle factor may then be computed, the lifecycle factor being related to the size of the customer and the growth thereof according to the selected lifecycle measure)** [Column 4, lines 4-6, Column 5, lines 28-30]:

predefining which of the plurality of potential interactions enable movement of a contact of the plurality of contacts from a first contact relationship level of the plurality of contact relationship levels to a second relationship level of the plurality of relationship levels and from a first marketing phrase to a second marketing phase **(criteria for each lifecycle stage may be defined. The criteria may, for example, include a Boolean expression that evaluate the True or False, may include mathematical operators and/or may include date-based expressions, for example. The customer maybe categorized into one of the lifecycle states depending upon which of the criteria is satisfied upon the application of transaction data thereto) {a customer moves between lifecycle stages according to parameters such as account creation date, revenue, growth, lifecycle factor, etc.}** [Column 5, line 61 – Column 6, line 24, Table 2].

As per claim 36, Cheng et al. teaches a method in accordance with claim 33, wherein assigning each contact of the plurality of contacts to a contact relationship level of the plurality of contact relationship levels as each actual interaction is recorded comprises assigning each contact to a contact relationship level based on which potential interactions of the plurality of potential interactions are determined to be necessary to move each contact from the first contact relationship level of the plurality of contact relationship levels to the second relationship level of the plurality of contact relationship levels and which potential interactions are determined to be necessary to move each contact from the first marketing phase to the second marketing phase **(criteria for each lifecycle stage may be defined. The criteria may, for example, include a Boolean expression that evaluate the True or False, may include mathematical operators and/or may include date-based expressions, for example. The customer maybe categorized into one of the lifecycle states depending upon which of the criteria is satisfied upon the application of transaction data thereto... at least one of the criteria includes the computed lifecycle factor.. Table 2 below is an example of how parameters such as account creation date, lifecycle measure, growth of the selected lifecycle measure and LCF may be combined to determine a customer's lifecycle stage) {the defined criteria dictates what interactions are necessary for customers to move between lifecycle stages according to parameters such as account creation date, revenue, growth, lifecycle factor, etc.}** [Column 5, line 61 – Column 6, line 50]

As per claim 37, although not explicitly taught by Chenge et al., Mulhern teaches a method in accordance with claim 1 further comprising aggregating, as part of a data stream for a particular contact, each actual interaction between the business and the particular contact to determine an interaction flow between the business and the particular contact within each contact relationship level of the plurality of contact relationship levels and within the at least one marketing phase, wherein the data stream for the particular contact includes a relative interaction value of each actual interaction between the business and the particular contact and a variable cost of each actual interaction between the business and the particular contact **(Customer lifetime models are appropriate when customers have ongoing relationships with organizations and future purchase and cost streams can be accurately forecast and the individual level) {the customer lifetime value is calculated by considering profit of a customer, price of purchase made by a customer, unit cost of purchase made by customer, variable marketing cost and discount rate}** [Page 30].

Cheng et al. is directed towards analyzing customer interactions and transactions with a company in determining the customer's relationship with said company, whereas Mulhern is directed towards customer analysis of profitability for developing targeted strategies. Thus, Cheng et al. and Mulhern are deemed to be directed towards the analogous endeavor of evaluating the relationship between a customer and a company. Therefore, it would have been obvious to one of ordinary skill in the art at the time of

invention to modify the teachings of Cheng et al. to aggregate interactions between the business and a contact, as taught by Mulhern, because doing so enables a company to maintain stability and growth in today's dynamic and highly competitive markets by evaluating the costs associated with retaining existing customers to develop efforts to ensure that current customers remain loyal and satisfied, induce existing customers to spend more, and grow their customer base [Column 1, lines 15-25].

As per claim 38, although not explicitly taught by Cheng et al., Mulhern teaches a method in accordance with claim 37 further comprising aggregating the data stream associated with each contact of the plurality of contacts into the data stream of all contacts of the plurality of contacts to determine an interaction flow between the business and the plurality of contacts within each contact relationship level of the plurality of the plurality of contact relationship levels and within the at least one marketing phase **(Customer lifetime models are appropriate when customers have ongoing relationships with organizations and future purchase and cost streams can be accurately forecast and the individual level) {the customer lifetime value is calculated by considering profit of a customer, price of purchase made by a customer, unit cost of purchase made by customer, variable marketing cost and discount rate}** [Page 30].

Cheng et al. is directed towards analyzing customer interactions and transactions with a company in determining the customer's relationship with said company, whereas

Mulhern is directed towards customer analysis of profitability for developing targeted strategies. Thus, Cheng et al. and Mulhern are deemed to be directed towards the analogous endeavor of evaluating the relationship between a customer and a company. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Cheng et al. to aggregate data of individual contacts, as taught by Mulhern, because doing so enables a company to maintain stability and growth in today's dynamic and highly competitive markets by evaluating the costs associated with retaining existing customers to develop efforts to ensure that current customers remain loyal and satisfied, induce existing customers to spend more, and grow their customer base [Column 1, lines 15-25].

As per claim 39, Cheng et al. teaches a method in accordance with claim 38 further comprising generating a summary report for the plurality of contacts, the summary report based on the aggregate data stream of the plurality of contacts contact **(Figure 3 is a diagram illustrating an exemplary report following the application of the method for categorizing customers.. Figure 4 is a diagram illustrating another exemplary report following the application of the method for customer categorization)** [Figures 3-4, Column 7, lines 35-40].

As per claim 40, Cheng et al. teaches a method in accordance with claim 39 further comprising comparing the data stream for each contact of the plurality of contacts and the summary report generated for each contact to the aggregate data

stream of the plurality of contacts and the summary report generated for the plurality of contacts to facilitate guiding decisions and process improvements relating to relationship development between the business and each contact of the plurality of contacts in real time **(As shown in Figure 3, the left hand graphic is a lifecycle distribution graph, showing the percentage distribution of the company's selected customers in the defined lifecycle stages over four selected quarters. The right hand graphic of Figure 3 represents the lifecycle trend of the company's selected customers over the same four quarters. This graphic may give the company's decision makers with possible clues as to the future status of the selected customers' relationship with the company. Armed with such intelligence, the decision makers may take corrective action and/or confirm whether the desired relationship has indeed developed or is developing... Figure 4 shows other graphical representations of the customer categorization data obtained by applying the method according to the present invention to customer transaction data, again on a browser 200. The left hand graphic is a representation of the number of the selected customers in each lifecycle stage, whereas the right hand graph shows the percentage of customers in each lifecycle stage)** [Figures 3-4, Column 7, line 61 – Column 8, line 24].

As per claim 41, Cheng et al. does not explicitly teach a method in accordance with claim 38 further comprising:

determining an aggregate relative interaction value for the plurality of contacts;  
and

correlating the aggregate relative interaction value with at least one of business profits, customer satisfaction, and other key performance indicators of the business, wherein the aggregate relative interaction value is a leading indicator of business profits, customer satisfaction, and other key performance indicators of the business.

However, Mulhern determines an aggregate relative interaction value for the plurality of contacts **(the Gini coefficient of the Lorenz curve)** [Figure 4, Pages 34-36] and correlates the aggregate relative interaction value to business profits **{cumulative % of profit based on cumulative % of customers}**, wherein the aggregate relative interaction value is a leading indicator of business profits, customer satisfaction and other key performance indicators of the business **{customer lifetime value}** **(Future purchases are forecasted and profitability is estimated by discounting future cash flows and variable costs to a present value. This is the standard customer lifetime value approach... Equations 1 and 2 incorporate customer profit over a series of discrete time periods)** [Pages 30].

Cheng et al. is directed towards analyzing customer interactions and transactions with a company in determining the customer's relationship with said company, whereas Mulhern is directed towards customer analysis of profitability for developing targeted strategies. Thus, Cheng et al. and Mulhern are deemed to be directed towards the

analogous endeavor of evaluating the relationship between a customer and a company. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Cheng et al. to include an aggregate relative interaction value correlated to business profits, as taught by Mulhern, because doing so enables a company to maintain stability and growth in today's dynamic and highly competitive markets by evaluating the costs associated with retaining existing customers to develop efforts to ensure that current customers remain loyal and satisfied, induce existing customers to spend more, and grow their customer base [Column 1, lines 15-25].

As per claim 42, although not explicitly taught by Cheng et al., Mulhern teaches a method in accordance with claim 38 further comprising:

using the aggregated data stream to facilitate iterative improvement of business performance **(A firm can increase a customer's actual or potential profit by improving product or service performance, changing prices or conducting effective communications)** [Page 30]; and

adjusting predetermined relative interaction values to reflect new values suggested from results obtained from a relationship tracking system **(a more advanced form of profitability analysis would include response coefficients that account for the effects of marketing efforts on customer profit; One methodological area in need of research concerns the prediction of individual customer purchasing behavior so that lifetime models can be calibrated)** [Pages 30, 38].



Cheng et al. is directed towards analyzing customer interactions and transactions with a company in determining the customer's relationship with said company, whereas Mulhern is directed towards customer analysis of profitability for developing targeted strategies. Thus, Cheng et al. and Mulhern are deemed to be directed towards the analogous endeavor of evaluating the relationship between a customer and a company. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Cheng et al. to utilize aggregated data to facilitate iterative improvement of business performance and adjust predetermined relative interaction values, as taught by Mulhern, because doing so enables a company to maintain stability and growth in today's dynamic and highly competitive markets by evaluating the costs associated with retaining existing customers to develop efforts to ensure that current customers remain loyal and satisfied, induce existing customers to spend more, and grow their customer base [Column 1, lines 15-25].

7. Claims 28, 31, 32, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al. and Mulhern as applied to claim 1 above, and further in view of Walter et al. (US Patent #6,334,110).

As per claim 28, although not explicitly taught by Cheng et al., Walter et al. teaches a method in accordance with claim 1 further comprising receiving contact information and storing the contact information to create a contact profile (**customer**

**profiles 230)** and cross-reference the contact profile against a unique identifier for easy retrieval and update **(Willard's name and customer identification is entered and displayed at 510 and 520; Willard's name and customer identification are entered and displayed at 610 and 620. The different profiles that Willard fits into are shown at 550, 560 and 570. ...The system responds by presenting profiles of other customers who have similar browsing and purchasing behavior to Willard. These other customers are shown by customer name 630; The customer name may be entered and displayed and is shown at 410. The customer identification may be entered and displayed and is shown at 420)**, wherein the contact information includes the ongoing interaction record **(customer history 226 is made up of touchpoint data 228, customer profiles 230, customer segments 222 and a campaign plan 234; a sample temporal browsing or buying behavior report for Willard for a two-day period may be as follows and contains the following records, shown in Table 1; The system responds by presenting all of the customer's behavior during the interval specified. Each behavior is an interaction with the date 460, time of day 470, channel 480, activity 490, type of good 492 and the actual goods browsed or bought 494)** [Column 4, lines 25-28, Column 5, lines 56-64, Column 6, lines 4-5, 34-38, Table 1].

Both Cheng et al. and Walter et al. are directed towards analyzing customer interactions and transactions with a company, and Mulhern is directed towards analyzing customer interactions and transactions with a company; thus, they are

analogous references directed towards the same field of endeavor. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined teachings of Cheng et al. and Mulhern to include the step of creating contact profiles with a unique identifier using received contact information, because doing so allows presentation of other customers with similar browsing and purchasing behavior and customer value, thereby enabling a marketing analyst to decide what products and offers might be good matches for specific customers (and like customers), which is a goal of Walter et al. [Column 6, lines 47-49].

Further, one of ordinary skill in the art would have recognized that applying the known technique of Walter et al. would have yielded predictable results and resulted in an improved system. It would have been recognized that applying the technique of Walter et al. to the combined teachings of Cheng et al. and Mulhern would have yielded predictable results because the level of ordinary skill in the art demonstrated by the references applied shows the ability to incorporate such customer identification information coupled to customer interaction history records. Further, applying the use of contact profiles with unique identifiers to the teachings of Cheng et al. would have been recognized by those of ordinary skill in the art as resulting in an improved system that would enhance the ability of Cheng et al. to retrieve information and reports relating to a specific customer by entering the customer's name in an input field, or expanding the available pull down window offerings for the selection of customers based on a customer parameter such as a unique identifier [Column 7, lines 46-59].

As per claim 31, although Cheng et al. teaches a method in accordance with claim 1 with generation of reports relating to the categorization of customers according to lifecycle stages, the combined teachings of Cheng et al. and Mulhern do not explicitly disclose generating reports that help management improve upon a marketing strategy to reduce risk and maximize profits

However, Walter et al. teaches a method in accordance with claim 1 further comprising generating reports that help management improve upon a marketing strategy to reduce risk and maximize profits **(At 1050 the number of offer viewings, unique viewings, number of sales per channel and the campaign effectiveness score is shown; The campaign is described at 1110 and a graph showing the number of units sold per quarter is shown at 1120)** [Column 7, lines 26-36].

Both Cheng et al. and Walter et al. are directed towards analyzing customer interactions and transactions with a company, and Mulhern is directed towards analyzing customer interactions and transactions with a company; thus, they are analogous references directed towards the same field of endeavor. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined teachings of Cheng et al. and Mulhern to include the step of generating reports, because doing so allows doing so enables an analyst to notice purchasing trends to infer future behavior, thereby enabling a marketing analyst to decide what

products and offers might be good matches for specific customers (and like customers), which is a goal of Walter et al. [Column 5, lines 27-52, Column 6, lines 47-49].

As per claim 32, although Cheng et al. teaches a method that provides a detailed history of past interactions, the combined teachings of Cheng et al. and Mulhern do not explicitly disclose storing a history of current or planned interactions.

However, Walter et al. provides a detailed history of past interactions, current interactions, and planned interactions **[In step 310, a report of Willard's browsing or shopping behavior gathered from all three channels is assembled. Note that daily interactions through the three channels may be grouped into weekly, monthly, or annual profiles... The present invention can note these trends (shopping behavior trends) and use them to infer Willard's future behavior]** [Table 1, Column 4, line 49 – Column 5, line 25].

Both Cheng et al. and Walter et al. are directed towards analyzing customer interactions and transactions with a company, and Mulhern is directed towards analyzing customer interactions and transactions with a company; thus, they are analogous references directed towards the same field of endeavor. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined teachings of Cheng et al. and Mulhern to include the step of creating a transaction log for each contact, because doing so allows doing so enables an analyst

to notice purchasing trends to infer future behavior, thereby enabling a marketing analyst to decide what products and offers might be good matches for specific customers (and like customers), which is a goal of Walter et al. [Column 5, lines 27-52, Column 6, lines 47-49].

As per claim 34, Cheng et al. does not explicitly teach a method in accordance with claim 1 further comprising pre-configuring a relationship tracking system with the plurality of potential interactions and the associated relative interaction value and variable cost for each potential interaction.

However, Mulhern considers the variable costs of interaction between a business and a customer **(A fully developed profitability model features the assignment of variables costs to customers.... In some industries there are specific and definable acquisition costs, such as prospecting sales calls, product specifications, and price discounts)** [Page 29].

Cheng et al. is directed towards analyzing customer interactions and transactions with a company in determining the customer's relationship with said company, whereas Mulhern is directed towards customer analysis of profitability for developing targeted strategies. Thus, Cheng et al. and Mulhern are deemed to be directed towards the analogous endeavor of evaluating the relationship between a customer and a company. Therefore, it would have been obvious to one of ordinary skill in the art at the time of

invention to modify the teachings of Cheng et al. to include the consideration of variable costs of interaction between the business and customer, as taught by Mulhern, because doing so enables a company to maintain stability and growth in today's dynamic and highly competitive markets by evaluating the costs associated with retaining existing customers to develop efforts to ensure that current customers remain loyal and satisfied, induce existing customers to spend more, and grow their customer base [Column 1, lines 15-25].

Further, Walter et al. teaches the step of anticipating potential interactions **[In step 310, a report of Willard's browsing or shopping behavior gathered from all three channels is assembled. Note that daily interactions through the three channels may be grouped into weekly, monthly, or annual profiles... The present invention can note these trends (shopping behavior trends) and use them to infer Willard's future behavior]** [Table 1, Column 4, line 49 – Column 5, line 25].

Cheng et al., Mulhern, and Walter et al. are each directed towards analyzing customer interactions and transactions with a company; thus, they are analogous references directed towards the same field of endeavor. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined teachings of Cheng et al., and Mulhern to include the step of creating a transaction log for each contact, because doing so allows doing so enables an analyst to notice purchasing trends to infer future behavior, thereby enabling a marketing analyst to

decide what products and offers might be good matches for specific customers (and like customers), which is a goal of Walter et al. [Column 5, lines 27-52, Column 6, lines 47-49].

As per claim 35, although not explicitly taught by Cheng et al. or Mulhern, Walter et al. teaches a method in accordance with claim 1, wherein recording each actual interaction between the business and each contact of the plurality of contacts comprises automatically recording each actual interaction in the ongoing interaction record in real time, wherein each actual interaction is initiated by at least one of the business, a contact of the plurality of contacts, and an automatic trigger based on one of a previous actual interaction and an integrated market action plan **[In step 310, a report of Willard's browsing or shopping behavior gathered from all three channels is assembled. Note that daily interactions through the three channels may be grouped into weekly, monthly, or annual profiles... The present invention can note these trends (shopping behavior trends) and use them to infer Willard's future behavior. The present invention performs this by capturing Willard's interactions with each endpoint... When Willard visits a physical store, the in-store scanners feed the in-store central processor which sends the time of purchase as well as the list of groceries and sporting goods that were bought to the database system... At this point, all of the customer endpoints have captured information which is sent to the database system, which can create a display or**



**database records as shown in Table 1]** [Table 1, Column 4, line 49 – Column 5, line 53, Table 1].

Both Cheng et al. and Walter et al. are directed towards analyzing customer interactions and transactions with a company; thus, they are analogous references directed towards the same field of endeavor. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Cheng et al. to include the step of automatically recording interactions between the business and a contact, because doing so allows doing so enables an analyst to notice purchasing trends to infer future behavior, thereby enabling a marketing analyst to decide what products and offers might be good matches for specific customers (and like customers), which is a goal of Walter et al. [Column 5, lines 27-52, Column 6, lines 47-49].

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al. and Mulhern as applied to claim 1 above, and further in view of Boe et al. (US Patent #6,236,975)

As per claim 3, the combined teachings of Cheng et al. and Mulhern do not explicitly teach a method in accordance with claim 1 further comprising modeling alternative strategies in advance of investment by anticipating potential interactions, fixed costs and variable costs associated with each potential interaction necessary to

carry out the alternative strategies, or running reports based on status quo, best case scenario, and worst case scenario.

Although not explicitly taught by the combined teachings of Cheng et al. Boe et al., and Walter et al., Mulhern teaches:

anticipating potential interactions **(Customers can be evaluated based on present purchase behavior or of the anticipated future stream of purchases)** [Page 28], fixed costs associated with each potential interaction, and variable costs associated with each potential interaction, the potential interactions being necessary to carry out the alternative strategies **(A fully developed profitability model features the assignment of variables costs to customers.... In some industries there are specific and definable acquisition costs, such as prospecting sales calls, product specifications, and price discounts)** [Page 29];

selecting a best new planned strategy **(Another factor that may relate to customer profitability is customer satisfaction. Anderson et al. find a relationship between customer satisfaction, measured at the individual customer level, and firm profitability, measured at the firm level. Implicit in this finding is that satisfaction at the individual customer level is correlated with individual customer profitability... Customer profitability is also likely to be determined by several other behavioral factors including price sensitivity, brand loyalty, and purchase timing, as well as perceptual factors such as perceived value, brand attitude, and attitude toward advertisements)** [Pages 37-38, Table 4];

configuring a relationship tracking system to track an implementation of the selected best new planned strategy (**Research is also needed to explore the distribution of customer profitability across customers. The distribution of profitability is likely to vary dramatically for different brands, products and industries.. Identification of what determining factors relate to the degree of disparity in profitability can help managers understand how marketing efforts relate to profitability at the customer level**) [Page 38]; and

tracking actual results in executing the selected best new planned strategy (**The degree is disparity is likely to be influenced by factors such as the breadth of assortment and prices offered and the heterogeneity of customers needs and buying behaviors. Further research is needed to identify how such factors influence the disparity of profitability across customers**) [Page 38].

Cheng et al. is directed towards analyzing customer interactions and transactions with a company in determining the customer's relationship with said company, whereas Mulhern is directed towards customer analysis of profitability for developing targeted strategies. Thus, Cheng et al. and Mulhern are deemed to be directed towards the analogous endeavor of evaluating the relationship between a customer and a company. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Cheng et al. to include the consideration of variable costs of interaction between the business and customer, and to select a new strategy, configure a relationship tracking system to track an implementation of the selected new

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strategy, and tracking actual results in execution of the selected new strategy, as taught by Mulhern, because doing so enables a company to maintain stability and growth in today's dynamic and highly competitive markets by evaluating the costs associated with retaining existing customers to develop efforts to ensure that current customers remain loyal and satisfied, induce existing customers to spend more, and grow their customer base [Column 1, lines 15-25], and further to enable a company to obtain greater understanding of the types relationships companies have with customers and the profitability of each type of relationship.

Further, Boe et al. teaches a "what-if" page for evaluating status quo, best and worst case scenarios by allowing the customer to make adjustments by changing his or her demographic parameters such as income level, number of children, and the like [Column 13, lines 8-11] and provides graphical reports that compare the customer's responses to the responses of other customers with the same demographics [Column 5, lines 6-9].

Both Cheng et al. and Boe et al. are directed towards customer analysis for targeted marketing, and Mulhern is directed towards analyzing customer interactions and transactions with a company. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined teachings of Cheng et al. and Mulhern to include the step of "what-if" analysis reports concerning best and worst case scenario and maintaining the status quo, because doing so further

enables businesses to target its marketing efforts to specific potential customers who may be more likely to purchase specific products or services than other potential customers, which is a goal of Boe et al. [Column 3, lines 39-43].

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shapiro (USPGPub 2002/0059283) manages customer relations through the continual exchange of information with customers.

Thompson et al. (US Patent #7,216,087) assists a sales representative in selling by monitoring interactions between said sales representative and a customer, and developing sales strategies based on the progress of the customer within the sales cycle.

McArdle et al. (US Patent #6,622,126) teaches segment migration that makes segment migration, the movement of individuals between segments over time, easily trackable.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PETER CHOI whose telephone number is (571)272-6971. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Van Doren can be reached on (571) 272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

July 18, 2008

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